

Axle Driving System

Abstract

An axle driving system which houses in a housing thereof a hydrostatic transmission, axles, and a driving gear train for connecting output means of the hydraulic transmission and axles, so as to transmit power from a driving source to the hydrostatic transmission and to change the speed, thereby driving the axles. A first chamber therein contains the hydrostatic transmission and a second chamber therein contains the driving gear train. Both the first and second chambers are independent of each other so as to prevent a foreign object, such as iron powder produced in the driving gear train, from entering the hydrostatic transmission. The system includes an L-like-shaped center section on which the hydrostatic transmission is offset such that an imaginary plane which includes a motor mounting surface passes in proximity to the axis of a pump shaft. The pump shaft is disposed perpendicular to the axles. The motor shaft is disposed in parallel thereto. A hydraulic pump is positioned between the hydraulic motor and the axles, so that the housing for the hydrostatic transmission, axles and driving gear train, is smaller in width to thereby make the system more compact.